

WHAT IS CLAIMED IS:

1. A dry etching method comprising the steps of:
preparing a layer to be etched; and
dry-etching said layer using a mask made of a tantalum
or a tantalum nitride under a reaction gas of a carbon
monoxide with an additive of a nitrogen containing compound
gas.
2. A microfabrication method comprising the steps of:
forming a mask made of a tantalum on a layer to be
etched; and
dry-etching said layer using said mask under a reaction
gas of a carbon monoxide with an additive of a nitrogen
containing compound gas.
3. The method as claimed in claim 2, wherein said step of
forming a mask includes forming a resist pattern on said layer
to be etched and sputtering a mask layer using a tantalum
target.
4. A microfabrication method comprising the steps of:
forming a mask made of a tantalum nitride on a layer to
be etched; and
dry-etching said layer using said mask under a reaction
gas of a carbon monoxide with an additive of a nitrogen

containing compound gas.

5. The method as claimed in claim 4, wherein said step of forming a mask includes forming a resist pattern on said layer to be etched and ~~reactive-sputtering~~ a mask layer using a tantalum target under a reaction gas containing at least a nitrogen gas.

6. The method as claimed in claim 5, wherein said reaction gas containing at least a nitrogen gas is a mixture gas of an argon gas and a nitrogen gas.

7. The method as claimed in claim 4, wherein said step of forming a mask includes forming a resist pattern on said layer to be etched and sputtering a mask layer using a tantalum nitride target.

8. A dry etching mask used in dry-etching under a reaction gas of a carbon monoxide with an additive of a nitrogen containing compound gas, said mask being made of a tantalum or a tantalum nitride.

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